

FORM PTO-1449  
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE  
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## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Christen M. Anderson et al.

FILING DATE

March 14, 2001

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09/810644

03/14/01

## U.S. PATENT DOCUMENTS

| *EXAMINER<br>INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE<br>IF APPROPRIATE |
|----------------------|-----------------|------|------|-------|----------|-------------------------------|
| AA                   |                 |      |      |       |          |                               |

## FOREIGN PATENT DOCUMENTS

|    |    | DOCUMENT<br>NUMBER | DATE     | COUNTRY | TRANSLATION |    |
|----|----|--------------------|----------|---------|-------------|----|
|    |    |                    |          |         | YES         | NO |
| RA | AB | EP 0 130 074 A     | 01/02/85 | EPO     |             |    |
| RA | AC | EP 0 477 961 A     | 04/01/92 | EPO     |             |    |
| RA | AD | EP 0 770 610 A     | 05/02/97 | EPO     |             |    |
| RA | AE | WO 98/19714        | 05/14/98 | WIPO    |             |    |
| RA | AF | WO 98/28415        | 07/02/98 | WIPO    |             | X  |
| RA | AG | WO 99/07845        | 02/18/99 | WIPO    |             |    |

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

|    |    |  |
|----|----|--|
| RA | AH | Adrian et al., "Sequences Required for Delivery and Localization of the ADP/ATP Translocator to the Mitochondrial Inner Membrane," <i>Molecular and Cellular Biology</i> 6(2):626-634, 1986.   |
| RA | AI | Aquila et al., "Complete Amino Acid Sequence of the ADP/ATP Carrier from Beef Heart Mitochondria," <i>Hoppe-Seyler's Z. Physiol. Chem.</i> 363:345-349, 1982.  |
| RA | AJ | Block et al., "Atractyloside and Bongkreikic Acid Sites in the Mitochondrial ADP/ATP Carrier Protein," <i>FEBS Letters</i> 131(2):213-218, 1981.   |
| RA | AK | Block et al., "Chemical Modifications and Active Site Labeling of the Mitochondrial ADP/ATP Carrier," <i>Methods in Enzymology</i> 125:658-670, 1986.  |
| RA | AL | Block et al., "Fluorescent Probes of the Mitochondrial ADP/ATP Carrier Protein," <i>Methods in Enzymology</i> 125: 639-649, 1986.  |
| RA | AM | Bojanovski et al., "Studies on the Adenine Nucleotide Translocase from Rat Liver Mitochondria," <i>Eur. J. Biochem.</i> 71:539-548, 1976.  |
| RA | AN | Boulay et al., "Photolabeling Approach to the Study of the Topography of the Atractyloside Binding Site in Mitochondrial Adenosine 5'-Diphosphate/Adenosine 5'-Triphosphate Carrier Protein," <i>Biochemistry</i> 22: 477-484, 1983. |
| RA | AO | Boulay et al., "Synthesis and Properties of Fluorescent Derivatives of Atractyloside as Potential Probes on the Mitochondrial ADP/ATP Carrier Protein," <i>Analytical Biochemistry</i> 128:323-330, 1983.                            |

EXAMINER

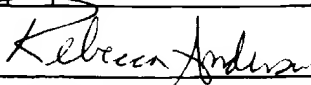
Rebecca Anderson

DATE CONSIDERED

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| *EXAMINER<br>INITIAL  | DOCUMENT NUMBER    | DATE   | NAME   | CLASS  | SUBCLASS | FILING DATE<br>IF APPROPRIATE            |    |
| BA  |                    |  |  |  |          |  |    |
| <b>FOREIGN PATENT DOCUMENTS</b>   |                    |  |  |  |          |  |    |
|   | DOCUMENT<br>NUMBER | DATE   | COUNTRY  |  |          | TRANSLATION                              |    |
|   |                    |  |  |  |          | YES                                      | NO |
| BB  |                    |  |  |  |          |  |    |
| <b>OTHER PRIOR ART</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>  |                    |  |  |  |          |  |    |
| <i>RA</i>   | BC                 |  | Brandolin et al, "Partial Purification of an Atractyloside-Binding Protein from Mitochondria," <i>FEBS Letters</i> 46(1):149-153, 1974.  |  |          |  |    |
| <i>RA</i>   | BD                 |  | Brandolin et al., "Substrate-Induced Modifications of the Intrinsic Fluorescence of the Isolated Adenine Nucleotide Carrier Protein: Demonstration of Distinct Conformational States," <i>Biochemistry</i> 24:1991-1997, 1985.                 |  |          |  |    |
| <i>RA</i>   | BE                 |  | Brunelli and Pall, "A Series of Yeast Shuttle Vectors for Expression of cDNAs and Other DNA Sequences," <i>Yeast</i> 9:1299-1309, 1993.  |  |          |  |    |
| <i>RA</i>   | BF                 |  | Cozens et al., "DNA Sequences of Two Expressed Nuclear Genes for Human Mitochondrial ADP/ATP Translocase," <i>J. Mol. Biol.</i> 206:261-280, 1989.   |  |          |  |    |
| <i>RA</i>   | BG                 |  | Fiore et al., "The Mitochondrial ADP/ATP Carrier: Structural, Physiological and Pathological Aspects," <i>Biochimie</i> 80:137-150, 1998.  |  |          |  |    |
| <i>RA</i>   | BH                 |  | Giraud et al., "Expression of Human <i>ANT2</i> Gene in Highly Proliferative Cells: GRBOX, a New Transcriptional Element, Is Involved in the Regulation of Glycolytic ATP Import into Mitochondria," <i>J. Mol. Biol.</i> 281:409-418, 1998.   |  |          |  |    |
| <i>RA</i>   | BI                 |  | Green and Reed, "Mitochondria and Apoptosis," <i>Science</i> 281:1309-1312, August 28, 1998.   |  |          |  |    |
| <i>RA</i>   | BJ                 |  | Klingenberg et al., "Isolation of the ADP, ATP Carrier as the Carboxyatractylate Protein Complex from Mitochondria," <i>Biochimica et Biophysica Acta</i> 503:193-210, 1978.   |  |          |  |    |
| <i>RA</i>   | BK                 |  | Klingenberg, "The ADP-ATP Translocation in Mitochondria, a Membrane Potential Controlled Transport," <i>J. Membrane Biol.</i> 56:97-105, 1980.   |  |          |  |    |
| <i>RA</i>   | BL                 |  | Klingenberg, M., "Principles of Carrier Catalysis Elucidated by Comparing Two Similar Membrane Translocators from Mitochondria, the ADP/ATP Carrier and the Upcoupling Protein," <i>Annals New York Academy of Sciences</i> 456:279-288, 1985. |  |          |  |    |
| <i>RA</i>   | BM                 |  | Ku et al., "The Human Fibroblast Adenine Nucleotide Translocator Gene," <i>Journal of Biological Chemistry</i> 265(27): 16060-16063, 1990.   |  |          |  |    |
| EXAMINER<br><i>Rebecca Jordan</i>   |                    |  |  | DATE CONSIDERED<br><i>3/29/04</i>                |          |  |    |
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| CA  |                    |  |                 |   |                                    |                               |
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|   | DOCUMENT<br>NUMBER | DATE   | COUNTRY         | TRANSLATION                               |                                    |                               |
|   |                    |  |                 | YES                                       | NO                                 |                               |
| CB  |                    |  |                 |   |                                    |                               |
| <b>OTHER PRIOR ART</b> <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>  |                    |  |                 |   |                                    |                               |
| RL  | CC                 | Lauquin and Vignais, "Interaction of [ <sup>3</sup> H]Bongkreic Acid with the Mitochondrial Adenine Nucleotide Translocator," <i>Biochemistry</i> 15(11):2316-2322, 1976.  |                 |   |                                    |                               |
| RL  | CD                 | Lauquin et al., "Isobongkreic Acid, a New Inhibitor of Mitochondrial ADP-ATP Transport: Radioactive Labeling and Chemical and Biological Properties," <i>Biochemistry</i> 15(11):2323-2327, 1976.  |                 |   |                                    |                               |
| RL  | CE                 | Li et al., "A Human Muscle Adenine Nucleotide Translocator Gene Has Four Exons, is Located on Chromosome 4, and is Differentially Expressed," <i>Journal of Biological Chemistry</i> 264(24): 13998-14004, 1989.   |                 |   |                                    |                               |
| RL  | CF                 | Li et al., "OXBOX, a Positive Transcriptional Element of the Heart-Skeletal Muscle ADP/ATP Translocator Gene," <i>Journal of Biological Chemistry</i> 265(33): 20585-20588, 1990.  |                 |   |                                    |                               |
| RL  | CG                 | Marzo et al., "Bax and Adenine Nucleotide Translocator Cooperate in the Mitochondrial Control of Apoptosis," <i>Science</i> 281:2027-2031, September 25, 1998.   |                 |   |                                    |                               |
| RL  | CH                 | Murdock et al., "Up-Regulation of Nuclear and Mitochondrial Genes in the Skeletal Muscle of Mice Lacking the Heart/Muscle Isoform of the Adenine Nucleotide Translocator," <i>The Journal of Biological Chemistry</i> 274(20):14429-14433, May 14, 1999. |                 |   |                                    |                               |
| RL  | CI                 | Piozzi et al., "Structure of Atroctyloside," Chemical Abstracts Acc. No. 67:117201, 1967.  |                 |   |                                    |                               |
| RL  | CJ                 | Piozzi et al., "Struttura dell'attrattiloside," <i>Gazzetta Chimica Italiana</i> 97(6): 935-954, 1967. (English summary on page 936)   |                 |   |                                    |                               |
| RL  | CK                 | Plano et al., "Rickettsia Prowazekii and ATP/ADP Translocase," <i>Annals of the New York Academy of Sciences</i> 590: 397-407, 1990.   |                 |   |                                    |                               |
| RL  | CL                 | Rosenberg, <i>Protein Analysis and Purification: Benchtop Techniques</i> , Birkhauser, Boston, pp. 335-347, 1996.  |                 |   |                                    |                               |
| RL  | CM                 | Roux et al., "Fluorometric Titration of the Mitochondrial ADP/ATP Carrier Protein in Muscle Homogenate with Atroctyloside Derivatives," <i>Analytical Biochemistry</i> 234:31-37, 1996.  |                 |   |                                    |                               |
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|   | DF |  |      |   |             |                                    |                               |
|   | DG |  |      |   |             |                                    |                               |
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| <i>DA</i>   | DH | Santi and Luciani (eds.), <i>Atractyloside: Chemistry, Biochemistry and Toxicology</i> , Piccin Medical Books, Padova, Italy, 1978.  |      |   |             |                                    |                               |
| <i>DB</i>   | DI | Smagula and Douglas, "Mitochondrial Import of the ADP/ADP Carrier Protein in <i>Saccharomyces Cerevisiae</i> ," <i>Journal of Biological Chemistry</i> 263(14): 6783-6790, 1988.   |      |   |             |                                    |                               |
| <i>DC</i>   | DJ | Sterling, "Direct Thyroid Hormone Activation of Mitochondria: The Role of Adenine Nucleotide Translocase," <i>Endocrinology</i> 119(1):292-295, 1986.  |      |   |             |                                    |                               |
| <i>DD</i>   | DK | Stubbs, "Inhibitors of the Adenine Nucleotide Translocase," <i>Pharmac. Ther.</i> 7:329-349, 1979.   |      |   |             |                                    |                               |
| <i>DE</i>   | DL | Tjaden et al. "Expression of a Plastidic ATP/ADP Transporter Gene in <i>Escherichia Coli</i> Leads to a Functional Adenine Nucleotide Transport System in the Bacterial Cytoplasmic Membrane," <i>Journal of Biological Chemistry</i> 273(16): 9630-9636, 1998   |      |   |             |                                    |                               |
| <i>DF</i>   | DM | Vignais et al., "[60] <sup>3</sup> H- or <sup>35</sup> S-Labeled Atractyloside and Carboxyatractyloside, Atractyloside Derivatives Used for Affinity Chromatography, Photoaffinity Labeling, and Spin Labeling, and <sup>3</sup> H- or <sup>14</sup> C-Labeled Bongkreikic Acid," <i>Methods in Enzymology</i> 55:518-533, 1979. |      |   |             |                                    |                               |
| <i>DG</i>   | DN | Vignais et al., "Adenosine Diphosphate Translocation in Mitochondria. Nature of the Receptor Site for Carboxyatractyloside (Gummiferin)," <i>Biochemistry</i> 12(8): 1508-1519, 1973.  |      |   |             |                                    |                               |
| <i>DA</i>   | DO | Yan and Sohal, "Mitochondrial Adenine Nucleotide Translocase is Modified Oxidatively During Aging," <i>Proc. Natl. Acad. Sci. USA</i> 95:12896-12901, October 1998.  |      |   |             |                                    |                               |
| EXAMINER<br><i>Lebecca Anderson</i>   |    |  |      | DATE CONSIDERED<br><i>3/29/04</i>         |             |                                    |                               |
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